

5.0 OTHER REQUIRED CEQA/NEPA SECTIONS

5.1 INTRODUCTION TO ADDITIONAL CEQA/NEPA REQUIREMENTS DISCUSSED IN THIS SECTION

As per the CEQA, section 15126.2 (b), Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, presents those significant environmental impacts that cannot be avoided in the granting of a new lease by the California State Lands Commission (CSLC) to the Long Wharf. Those impacts would remain significant and unavoidable (Class I), even after incorporation of available and feasible mitigation measures.

Per the CEQA (section 15126.2(c)), Section 5.3, Irreversible/Irretrievable Commitment of Resources, presents the irreversible changes related to the use of, or long-term commitment of, nonrenewable resources. Irreversible changes represent long-term environmental damages that could result from the proposed Project. Of the impacts presented in Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, even the impacts of oil spills over a long enough time period are reversible. However, if a large spill would cause enough water quality or biological damage so as to result in the elimination of a species, an irreversible impact would result.

As per the CEQA (section 15126.2(d)), Section 5.4, Growth Inducing Impacts of the Proposed Project, discusses the ways in which the proposed Project could foster economic or population growth, or induce additional housing, either directly or indirectly in the surrounding environment.

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS OF PROPOSED PROJECT THAT CANNOT BE MITIGATED TO LESS THAN SIGNIFICANT

Significant environmental impacts that cannot be avoided in the granting of a new lease by the CSLC to Long Wharf are presented below. These impacts would remain significant and unavoidable (Class I), even after incorporation of available and feasible mitigation measures.

- Large spills at Marine Terminal. Even though the chance of an oil spill is low, if an accidental spill occurs, unavoidable significant impacts can result. On average, four spills per year can be expected from the Long Wharf. Of these, two to three would be less than 1 gallon. The probability of a spill larger than 1,000 gallons from the terminal is 22 percent or one spill every 4 to 5 years. The annual probability of a spill greater than 42,000 gallons (1,000 bbls) is 3.4 percent or 1 spill every 29 years. Chevron is compliant with USCG regulations for spill response for responding to a small (50 bbls) spill and impacts are less than significant (Class III). However the effects of a small spill may still result in a significant adverse impact as identified in other resources sections (water quality, biology, fisheries sections) of this DEIR. The consequences of a spill would depend on the size of the spill, the effectiveness

of the response effort, and the biological, commercial fisheries, shoreline and other resources impacted by the spill. Moderate spills of 1,000 gallons could have, and large spills of 1,000 bbl most likely would result in a significant adverse impact (Class I) that would have residual effects after first response mitigation efforts.

- Large Spills from Vessels in Transit. The potential for a spill from the Marine Terminal, including the tank vessel while it is at the Terminal, was found to be much greater than the potential of a spill from a tank vessel transiting within the Bay. However, while the probability of a large spill from vessels in transit is small, the consequences of such a spill would be a significant adverse (Class I) impact.
- Spills of Group V Oils. Group V oils have a specific gravity great than 1, and will not float on the water; instead they will sink below the surface into the water column or possibly to the bottom. OSPR regulations stipulate that all facilities that transfer Group V oil must identify equipment that can be used to monitor and/or recover Group V oil. Chevron states in their Spill Preparedness and Emergency Response Plan that no reasonable technology currently exists for a Group V response in the San Francisco Bay. Nevertheless, Chevron has identified several dredging companies that may be able to provide assistance in the event of a spill. These companies can provide dredges, pumps, detection devices (fathometers with frequencies high enough to identify submerged oil), and silt curtains (silt curtains must be ordered from out of the area). Even so, it is difficult to monitor and predict the movement of Group V oils and to recover the oil while it is in the water. A Group V oil spill would be considered to be a significant adverse (Class I) impact.
- Discharge of Segregated Ballast Water. The discharge of segregated ballast water may contribute toxic algae, viruses, and harmful bacteria to San Francisco Bay (Class I). Even with adherence to the provisions in the California Marine Invasive Species Control Act, and reporting requirements, until a feasible system to kill organisms in ballast water is developed, the discharge of ballast water to San Francisco Bay will remain a significant adverse (Class I) impact.
- Introduction of Non-Indigenous Species. The introduction of non-indigenous species through terminal operations could have significant adverse impacts (Class I) to fishes, water-associated birds, marine mammals, and listed species through direct competition, destabilization of the food web, accumulation of toxins in the tissues of the voraciously filter-feeding Asian clam, or the introduction of disease organisms or toxic algae. Compliance with the California Marine Invasive Species Control Act, including ballast water reporting will help to reduce the impact of ballast water discharges, but impacts will remain significant (Class I).
- Marine Anti-Fouling Paints. Marine anti-fouling paints are used to reduce nuisance algal and marine growth on ships. Anti-fouling paints are biocides that contain copper, sodium, zinc, and tributyltin (TBT) as the active ingredients. All of these are meant to be toxic to marine life that would settle or attach to the hulls of ships. Because of the high toxicity of organotins to marine organisms, the use of these

substances on vessels associated with the Long Wharf is considered to be a significant adverse impact to water quality that cannot be mitigated to less than significant (Class I). Impacts of anti-fouling paints on water quality may be partially mitigated if the Long Wharf requires that vessel operators document that vessels using the marine terminal have had no new applications of TBT or other biocide-based anti-fouling paints. However, until all TBT is phased out by 2008, vessels with old applications of TBT on their hulls will visit the terminal. Although it is reasonable for the Long Wharf to require vessels to document no new TBT applications (per IMO mandate), the Long Wharf cannot feasibly require vessels to remove TBT from their hulls until the IMO mandate comes into effect in 2008. Therefore, until all TBT is gone from vessels using the Long Wharf, impacts of organotins will remain significant (Class I).

- Spill Effects on Water Quality. The severity of impact from larger leaks or spills at the Long Wharf that cannot be easily contained will depend on: (1) spill size, (2) oil composition, (3) spill characteristics (instantaneous vs. prolonged discharge), (4) the effect of environmental conditions on spill properties due to weathering, and (5) the effectiveness of cleanup operations. In the event of an oil spill, the initial impacts will be to the quality of surface waters and the water column, followed by potential impacts to sedimentary and shoreline environments. Following an oil spill, hydrocarbon fractions will be partitioned into different regimes and each fraction will have a potential to affect on water quality. Large spills at the Long Wharf have the potential to result in significant adverse (Class I) impacts on water quality. Also, most tanker spills/accidents and larger spills that cannot be quickly contained either in the Bay or along the outer coast would result in significant adverse (Class I) impacts.
- Spill Effects on Biological Resources. An oil spill of 1,000 bbl or greater has the potential to have significant adverse impacts on biological resources (Class I). A spill between 50 and 1,000 bbl would also probably have significant biological impacts that might not be avoidable (Class I). Conclusions are based on relative sensitivity of the resource to oil, the vulnerability of the resource within San Francisco Bay, and the relative risk from a spill at the Terminal or from a Tanker servicing the Terminal.
- Routine Operations Effects on Commercial Fisheries. Routine operations have the potential to result in (Class I) impacts on Pacific herring fisheries. The impact may or may not occur due to: (a) the uncertainty over whether herring spawning will return to the Long Wharf area, (b) the uncertainty over the amount of total fishing area should herring indeed return, (c) the uncertainty over the ability to mitigate space use conflicts, should herring return to the area.
- Spill Effects on Commercial Fisheries. Potentially significant (Class I) impacts may affect shrimp, herring fishing, herring spawning, and recreational fishing inside the Bay from an oil spill. Fishing activities would be further impacted by closures of piers for recreational fishing and marinas for both commercial and recreational

1 fishing. Pier and marina closures and loss or damage to fisheries and fishing gear
2 would increase the impacts on commercial fishing operations and angling activities.
3 Along the outer coast, impacts would also have the potential to result in Class I
4 impacts from a large spill event.

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- 6 ➤ Spill Effects on Shoreline and Recreation Amenities. Impacts resulting from larger
7 oil releases at the Terminal, in the Bay, or along the outer coast have the potential to
8 degrade the environment and preclude the use of shoreline land and/or recreational
9 activity at the site of the release and to the area extent of the spread of the oiling.
10 The degree of impact, however, is influenced by many factors including, but not
11 limited to, spill location, spill size, type of material spilled, prevailing wind and current
12 condition, the vulnerability and sensitivity of the resource, and response capability.
13 Since it is impossible to predict with any certainty the potential consequences of
14 spills, impacts are considered to be adverse and significant (Class I) severe spills
15 could have residual effects that remain after first response cleanup occurs.

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- 17 ➤ Socioeconomic Effects from Spills. Impacts from oil releases could degrade the
18 environment and result in business interruption and loss of revenue during cleanup
19 operations, resulting in a significant (Class I) impact. Even with mitigation, in the
20 form of monetary compensation for losses, some impacts could be expected to
21 remain significant.

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- 23 ➤ Occasional Noise from Vessel Operations. On occasion, local residents have
24 complained of noise created by some of the ships that call on the Long Wharf. This
25 noise is most likely due to operation of onboard generators, and only from certain
26 ships. Due to the infrequent occurrences, noise measurements were not attainable,
27 and, thus assuming worst case, it was concluded that these infrequent operations
28 result in an adverse, significant (Class I) impact. Ships found to emit noise at levels
29 that exceed city standards should be required to correct the problem or have
30 additional constraints on berthing implemented. However, depending on the
31 feasibility of implementing berthing constraints or requiring noise abatement on
32 foreign vessels, impacts may remain significant.

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- 34 ➤ Spill Effects on Visual Environment. The Long Wharf is in an area of rapidly moving
35 current. If a spill is not detected immediately, the spread of a larger spill over a large
36 area could occur, and potentially impact shoreline areas on the East Bay north of the
37 Long Wharf, the mouth of Carquinez Strait, areas to the south of the Long Wharf,
38 and to the West Bay Shoreline across San Pablo Bay. Oiling would result in a
39 negative impression of the viewshed that has the potential to result in significant
40 adverse (Class I) impacts if residual effects after first response containment and
41 cleanup remain. Spills along the outer coast could result in significant (Class I)
42 impacts, especially where spills would be visible in the nearshore zone or at the
43 shoreline and where residual effects may remain after initial cleanup operations.

5.3 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES

As per CEQA (section 15126[f]), this section presents the irreversible changes related to the use of, or long-term commitment of, nonrenewable resources. Irreversible changes represent long-term environmental damages that could result from the Proposed Project.

- Of the impacts presented in Section 5.2, Significant Environmental Effects of Proposed Project that Cannot be Mitigated to Less than Significant, even the impacts of oil spills over a long enough time period are reversible. However, if a large spill would cause enough biological damage so as to result in the elimination of a species, an irreversible impact would result; and
- The Long Wharf operation indirectly acts as a stimulus for the extraction of oil reserves, adding to the eventual depletion of a non-renewable resource.

5.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

The Proposed Project involves a new lease for operation of the Long Wharf. If granted, the new lease would allow Chevron to continue to operate the Long Wharf, which has been operating since 1902 at its current location and since 1947 under lease from the CSLC. Chevron is not proposing to increase operations, and cannot do so as it is constrained by current capacity of the Refinery to handle the quantity of crude and product as analyzed in this DEIR. Thus, with no projected increase in handling capability, the proposed Project is not considered growth inducing, and would not directly or indirectly foster economic growth, populations growth, or the need for housing.

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